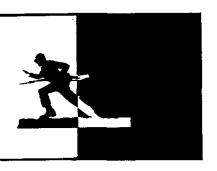
## INFANTRY NEWS



## **CHIEF OF INFANTRY UPDATE**

EDITOR'S NOTE: Infantrymen are encouraged to comment on the items that appear here and to suggest topics they would like to see covered in the future. Address suggestions to Commandant, U.S. Army Infantry School, ATTN: ATSH-TDI, Fort Benning, GA 31905-5593, or call DSN 835-2350/6951 or commercial (404) 545-2350/6951.

THE TRADOC SYSTEM MANAGER, Antitank Missiles, has provided the following update:

Improved Target Acquisition System (ITAS). The ITAS is designed to improve the dedicated antitank system (HMMWV-TOW) in the light forces. The backbone of all improvements is increased detection and recognition range under all battlefield conditions. Increased range will result in a more lethal weapon that offers more survivability through standoff and less potential fratricide through improved resolution.

Other primary improvements include automatic target tracker, laser range finder, integrated sight, direct view optic, automatic boresight, built-in test/built-in test equipment, and embedded training. The ITAS will be compatible with all present TOW missiles and will also be the target acquisition and fire control for the Advanced Missile System-Heavy (AMS-H).

A Department of the Army in-process review was conducted in January 1992, and the ITAS program was approved. The fielding of ITAS is projected for FY 1997.

The POC is CPT John Roth, DSN

835-1766 or commercial (404) 545-1766.

Advanced Missile System-Heavy (AMS-H). The AMS-H, the follow-on to the TOW family of missiles, will offer more range and less time of flight. The TOW-sized AMS-H is designed to be fired from all TOW launchers with increased lethality and gunner survivability. AMS-H will use the ITAS target acquisition and fire control systems.

AMS-H is in a technology analysis phase. The best technical approach has identified multiple technologies that may meet user requirements. Fielding for AMS-H is projected for 2002.

The POC is CPT John Roth, DSN 835-1766 or commercial (404) 545-1766.

Javelin (AAWS-M). The Advanced Antitank Weapon System-Medium has been designated the "Javelin" by the U.S. Army. The Javelin replaces the current Dragon antitank weapon system on a one-for-one basis. The Javelin missile attacks its target using state-of-the-art imaging infrared (IR) sensors and automatic in-flight target tracking.

The Javelin program is about 30 months into engineering and manufacturing development (EMD). A recent acquisition decision memorandum restructured the EMD phase of the program from 36 to 54 months. The extended EMD reduces the technical risk associated with the weapon's focal plane array (FPA) technology.

On 8 November 1991, the Javelin scored its fifth hit in as many firings. The latest hit came against a stationary T-72 in the open at 545 meters.

Although the Javelin's required weight is 45 pounds, the Army has

agreed to accept a weight of 49.5 pounds at the first-unit-equipped date.

The POC is MAJ Love, DSN 835-5510 or commercial (404) 545-5510.

Non-Line-of-Sight-Combined Arms (NLOS-CA). The NLOS-CA is a multi-mission area system capable of destroying threat armored vehicles, rotary wing aircraft, and such high priority targets as command and control vehicles and bridging equipment. It will allow a maneuver commander to fight the extended close battle beyond the line-of-sight of threat weapon systems. It can engage masked, dug-in, or defilade ground targets and hovering or maneuvering rotary aircraft at ranges of more than 10 kilometers from a defilade firing position.

The NLOS-CA also has the potential for use by other services. It will be mounted on a host vehicle that can carry at least six ready-to-fire missiles on board. The system will have dual-launch capability and will be day or night capable.

The previous NLOS program has been in development for the past 10 years. In December 1990, the NLOS program was midway through the full-scale development (FSD) phase when development was cancelled because of contractor cost overruns. The current guidance is to develop a low-risk, low-cost system that will meet basic combined arms requirements and that can be fielded rapidly. The basic requirements were developed by a special task force that included representatives from the materiel and combat development communities.

Further development and early unit testing are scheduled, and the projected first-unit-equipped date is the second quarter of FY 1998.

The POC is MAJ Ben Malto, DSN 835-5510/4317, or commercial (404) 545-3414/1766.

Line of Sight Antitank (LOSAT) Weapon System. The LOSAT is a highly mobile, adverse weather, day/night, direct fire, antiarmor weapon system. It is intended to replace the M901 Improved TOW Vehicle (ITV) in the antiarmor company of heavy maneuver battalions. This system will provide a leap-ahead capability for defeating the future threat main battle tank from any aspect angle.

The LOSAT system consists of a weapon module that holds 20 kinetic energy missiles (KEMs) mounted in a "stretched" Bradley M2A2 chassis. The KEM, combined with a state-of-the-art acquisition system, will more than match the lethality of any known or projected armor. The system's range, mobility, time of flight, accuracy, and survivability will be an improvement over the ITV.

Tests have included 17 successful

 missile firings and limited field testing of the advanced fire control system. LOSAT will remain in demonstration/validation until FY 2000. A total of six prototype vehicles and 160 missiles will be available by the end of FY 1998.

The POC is MAJ Randy Tatum, DSN 835-5510/4317, or commercial (404) 545-5510/4317.

THE OFFICER CANDIDATE SCHOOL (OCS) presented the prestigious Robert P. Patterson Award to Second Lieutenant William J. Hoy in February 1992. This most prestigious award is given each year in memory of the birthday of Judge Patterson, who was commissioned a second lieutenant from the World War I equivalent of OCS. He attained the rank of major and was recognized for his acts of gallantry and bravery by award of the Distinguished Service Cross, the Silver Star, and the Purple Heart.

The award is bestowed upon the most

outstanding Infantry officer graduate of OCS and the Infantry Officer Basic Course (IOBC).

Lieutenant Hoy is assigned to the 2d Battalion, 18th Infantry in the 3d Brigade of the 24th Infantry Division at Fort Benning. He was the Distinguished Leadership Graduate and Honor Graduate of OCS and the Distinguished Honor Graduate of IOBC.

THE PUBLICATIONS DIVISION of the Directorate of Training and Doctrine has provided the following update on the status of publications.

Two manuals are scheduled for publication soon:

FM 7-20, Infantry Battalion. This manual establishes a common base of tactical knowledge from which specific solutions to battalion-level tactical problems can be developed. It provides doctrinal principles and selected tactics, techniques, and procedures that have been proved on the battlefield. This

## BRADLEY CORNER

THE MASTER GUNNER Course continues to evolve in response to the demands of the field. Several areas of concern were discussed during the master gunner update at the 1991 Bradley Conference. Topping the list were the conduct of the Bradley Guiner Skills Test (BGST), the surface danger area diagram (SDAD), range operations, and short-range training plan (SRTP) development.

A new program of instruction (POI) has been proposed that, if implemented, will enable the course to meet the standards without unnecessary attrition.

Under the new POI, the overall length of the course will be increased from 10 to 12 weeks (10 weeks of master gunner training and two weeks of senior instructor-operator training). Although the BGST will still be a prerequisite, soldiers will now have an opportunity to retrain and retest. Class 2.92 which started 6 barrary 1003.

followed this new procedure and had no BGST failures.

SDAD instruction will increase by three days. Range operations will increase from two days to four to compensate for the new training requirements of FM 23-1, Bradley Gunnery. Additionally, more emphasis will be placed on Tables IX through XII, including dismounted training.

SRTP preparation will increase from two days to five, and the students will be required to present a more detailed plan. The actual time on the range will increase from five days to seven, which will allow more emphasis on Tables XI and XII. The students will ensure that actual dismonnted squad training is conducted in accordance with the FM 23-1.

Although the BGST will still be a line the senior instructor-operator. The POC at prerequisite, soldiers will now have an course, the current trend is a first-time Regiment is Ma proportiumity to retrain and retest. Class failure rate of 70 percent on Exam. 1 Todd. BFV Instructor/operator duties and 784-6136/6330.

responsibilities). This indicates that master guinners in the field are not training instructor operators according to the exported 46-hour program. Soldiers need your help in this area.

The full implementation of the new POI is not expected until 21 June 1992 (Class 5-92). Meanwhile, interim solutions for some of the current problems have been implemented by rescheduling the current program to allow more time specifically for the BGST and the SRTP.

These changes, along with your help in preparing the students, will insure our continued efforts to produce highly trained master gunners who will be capable of advising their commanders and command sergeants major in all areas of training.

The POC at the 29th infantry Regiment is MAI Lacombe or SFC Todd, BFV Instructor Company, DSN 784-6136/6330 manual is scheduled for publication and distribution by April 1992.

FM 7-8, Infantry Platoon and Squad. This manual provides tactics, techniques, and procedures on the way infantry rifle platoons and squads fight. It is aligned with the Army's AirLand Battle doctrine and should be used as a guide to training and combat operations. It is scheduled for publication and distribution by June 1992.

Coordinating drafts of the following manuals were recently fielded for review and comment:

FM 23-10, Sniper Training. This

manual provides information to use in training and equipping snipers, and to help snipers in their missions and operations. It discusses equipment, weapon capabilities, and fundamentals of marksmanship. It should be used as a reference when conducting sniper training.

FM 23-31, 40mm Grenade Launcher, M203. This manual provides technical information on the M203 grenade launcher, along with training and combat techniques. This information can be used to integrate the weapon into combat operations.

FM 23-33, 66mm HEAT Rocket, M72A1 and M72A2 (LAW). This manual discusses the LAW's characteristics, nomenclature, functioning, and employment. It also includes a training program and briefly discusses tactical employment procedures.

FM 57-38, Pathfinder Operations. This manual describes the procedures pathfinders use during various operations and includes the training and capabilities of pathfinder-qualified personnel. It serves as a ready reference on the organization, training, and employment of pathfinders.

THE LEADER BOOK described in Appendix B of Field Manual 25-101, Battle Focused Training, 1990, provides an easy way for leaders to manage training in individual Military Occupational Specialties (MOSs). In the Leader Book, a junior leader records some administrative data and the common task performance for each member of his unit. The book is especially helpful in keeping track of the specific MOS-related tasks a soldier has successfully completed and those he has yet to master.

The leader begins by recording in the book the tasks each soldier learned in advanced individual training. These tasks should be in each new soldier's training packet, recorded on DA Form 5286-1-R. Soldiers who became qualified in their MOSs at Reserve Forces schools receive the list of successfully completed tasks on DA Form 87. If these forms are missing, they can be reconstructed through information from the appropriate school.

After transferring these tasks to the Leader Book, the leader should determine which of the untaught tasks left in the Skill Level 1 Soldier's Manual apply to the unit's mission essential task list (METL) and add these to the Leader Book.

Although units may find this administrative task burdensome, it must be done if the Leader Book concept is to be effective. Leaders should look for ways to reduce the effort of this task through the use of pre-printed forms, or automation.

A leader should not overlook other sources of training that teach specific MOS tasks, such as local on-post troop schools (Basic NCO Academy, NBC School, and Unit-Level Logistics System certification course, for example) and the training provided in conjunction with the fielding of new equipment. When these are added to the tasks taught during "sergeants' time" on the training schedule, the number of tasks that have to be taught can be whittled down.

The Leader Book allows a leader to keep track of individual soldiers' MOS proficiency, and helps him with periodic counselling, efficiency reports, and planning. It also shows that he knows the training status of each of his soldiers.

(This item was provided by LTC Harry A. Stumpf, Inspector General, U.S. Army Forces Command, Fort McPherson, Georgia.)

WHEN SOME UNITS IN KOREA received their new M2A2 Bradley fighting vehicles last fall, the soldiers did not know that changes had been made in the "sliding" damper reservoir piston assembly on the M242 chain gun. As a result, many crews reported problems with the damper assembly.

For years, some gunners had been

using an informal check (one not found in the manual) for the presence of damper fluid. They simply pushed in on the red piston rod that points to the rear of the gun assembly. When they tried the same test on their new equipment, they found the rod did not resist when they pushed on it.

In the new guns, produced after serial number 6200, the damper reservoir piston does not resist when pushed in; it moves back and forth on the indicator rod. This modification was made because of the increased operating temperature and rate of wear when the gun is used in its air defense configuration. Although the gun on the M2A2 Bradley still has a high rate of fire of 200 rounds per minute, the same gun can be adapted to fire 500 rounds per minute.

The soldiers in other units receiving new Bradleys need to be advised of this difference and then follow the guidance of the Bradley New Equipment Training Teams in testing the damper fluid.

THE STOCK FUNDING Depot-Level Reparables (SFDLR) Program will bring about a dramatic change in maintenance operations and day-to-day operations.

In the past, when a unit replaced a major engine, for example, procurement funds picked up the bill. Under the SFDLR program, the cost of an engine will be charged to the unit's budget. The actual cost will be the Army Master Data File (AMDF) price for the item, reduced by the turn-in credit. Because it is usually cheaper to repair a piece of equipment than replace it, most maintenance and repair will take place at the lowest possible level.

The program has three main purposes—to improve discipline and visibility of depot-level repair; to realize the benefit of a single source for funding; and to make it easier to identify the costs associated with weapon systems.

The SFDLR Program goes into effect on 1 April 1992.

AN OPTIC SIGHT is being added to the M16A2 rifle. This sight will give infantry soldiers increased first-round hit probability and extend the distance at which they can begin engaging hostile targets to as much as 600 meters. The weapon, generically type-classified as the M16A3, places a 3- to 4-power magnification optic sight on the modified upper receiver of the M16A2.

The sight will straddle a mounting ramp, replacing the carrying handle now on the M16 family of rifles. A quick-change feature, however, will allow soldiers to use the conventional iron sights mounted on a snap-on carrying handle without any special tools.

The modified M16A3 rifles are scheduled to be fielded in 1992. The designers also plan to use the same sight, hardened against lasers, on the M249 squad automatic weapon.

THE FAMILY OF MEDIUM Tactical Vehicles (FMTVs) are now in production. These  $2\frac{1}{2}$ -ton and 5-ton trucks will be manufactured in 15 different configurations. Such variations as wreckers, cargo trucks, vans and dump trucks, as well as troop carriers, will be produced.

Newly designed axles and suspension systems, electronically controlled automatic transmissions, and "on-thefly" adjustable tire air system will improve operation in snow, sand, swamp, or rough terrain. Air lift and air drop models will provide rapid deployment capabilities. Aerodynamically reinforced high-strength structures, high visibility, fully electronic controls, and user-friendly operation will improve the driver's working environment. Generous wheel travel and advanced spring technology will improve ride and handling characteristics.

AN ARTILLERY BATTERY in the 6th Infantry Division in Alaska has been designated as airborne qualified—Battery B, 4th Battalion, 11th Field Artillery.

The new status of the battery, one of three firing batteries in the battalion, means the 6th Division can now parachute 105mm howitzer crews and their weapons into combat situations. Once on the ground, they will provide fire support to the infantry as they secure the area, conduct an ambush, or engage in other tactical maneuvers.

The battery will work closely with the division's airborne infantry unit, the 1st Battalion, 501st Infantry, and can be deployed with it, should the need arise.

AN EXPERIMENTAL ROBOT HMMWV (high mobility miltipurpose wheeled vehicle) can follow a road and avoid obstacles without manual assistance.

The vehicle, dubbed Nav Lab II, is an ambulance version of the M998-series HMMWV that has been modified to operate as an autonomous roadfollowing vehicle. Using the same automotive components as its standard counterpart, Nav Lab II has computer-controlled actuators that control acceleration, braking, and steering.

This vehicle can travel farther and faster and can be programmed to enact a wider range of tasks than its predecessor, Nav Lab I, built in 1986. In operation, on-board cameras view the scene ahead of the vehicle and feed the images into a computer. The computer then analyzes these images to find the edges of the road and automatically

generates driving commands that enable the vehicle to follow the road and avoid obstacles. The vehicle can be programmed from a suitcase-size portable control station.

A NEW FIELD RATION called the Long Life Ration Packet II (LLRP) is expected to provide a healthier and tastier diet for soldiers.

Similar to the MRE (meal, ready to eat), the LLRP is an updated version of the LLRP now used by Special Operations forces. Each menu contains 1,570 calories.

The LLRP has an expected shelf life of 10 years at 80 degrees Fahrenheit and is designed for storage in war reserves overseas. It would be issued to the troops who arrived during the early stages of a combat deployment.

This new ration is still in the developmental stages and will undergo extensive testing before it is fielded.

THE U.S. ARMY OFFICER Candidate Alumni Association, Inc., is seeking members. Graduates of any Army Officer Candidate School (OCS) or course are eligible for regular membership. Associate membership is available to non-OCS graduates who served as staff and faculty members at an OCS and other persons who have made and will continue to make significant contributions to the OCS program. Annual dues are \$10.00 for either class of membership.

Anyone who is interested in joining may write to Secretary, The U.S. Army Officer Candidate Alumni Association, Inc., P.O. Box 2192, Fort Benning, GA 31905-2192.

